

**Programme Specification**

**Title of Course: Game Development. Including the following courses and**

**pathways:**

**MSc Game Development (Programming)**

**MA Game Development (Design)**

**Date Specification Produced: February 2013**

**Date Specification Last Revised: September 2018**

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content of each module can be found in the Course Guide, on Canvas and in individual Module Descriptors.

**SECTION 1: GENERAL INFORMATION**

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| **Title:** | Game Development  Comprising the following courses and pathways:  MSc Game Development (Programming)  MA Game Development (Design) |
| **Awarding Institution:** | Kingston University |
| **Teaching Institution:** | Kingston University |
| **Location:** | Penryhn Road |
| **Programme Accredited by:** |  |

**SECTION 2: THE PROGRAMME**

**A. Programme Introduction**

The significant aspect of study on this course is its articulation with other taught Masters courses as part of Digital Media Kingston (DMK), a Post Graduate Micro-Studio that offers PlayStation/Next Gen games development alongside computer animation and user experience design. This provides an integrated learning environment where students can develop their media specialist practice as part of a community engaged in interdisciplinary collaborative innovation.

The Masters in Game Development encourages students to devise and participate in projects where they can develop as a games programmer or games designer whilst emphasising research informed industry focussed practice. Each subject pathway provides an intensive period of study that is made up of both course-specific modules and shared core modules within DMKs Postgraduate Framework. Our goal is to help students develop the critical thinking and the understanding of interdisciplinarity that will underpin their practice in the future.

The skills and knowledge gained will provide students with a firm foundation from which to undertake digital media research and are a platform for their personal and professional development in the practice of game development. It provides both a progression point towards the MA and MSc and is also an exit point from the course. Both the MA and MSc builds on the skills, knowledge and understanding acquired earlier in the Postgraduate Diploma phase and applies these in the creation of an original, digital media practical research project. The programme acknowledges students’ previous experience and that their study will continue to develop their personal approach to media practice. This will enable them to prepare for future employment or to engage in the extension of their study at Doctoral level.

The Masters Programme is offered in both full time and part time modes. The School has an excellent and proud history of employment both in large international companies and in UK based small and medium sized (SME) industries. The curriculum is backed by the research undertaken within the School. In addition it is informed by the School’s Industrial Advisory Panel.

**The Field and Pathways**

Game Development is one of the programmes within a suite of degrees being created as part of the Digital Media Kingston (DMK). The DMK brings together people with expertise in computer animation, games design, game development, user interfaces and other areas relating to digital media thus creating a rich environment where arts and computing students have the opportunity to work together. Considerable emphasis is placed on practical laboratory-based workshops and project work using specialist equipment. The software and hardware has been selected to be relevant to industry, such as the development on the same games consoles/development kit which would be used by professional games coders. Each of the pathways of Game Development is aligned to an industry role.

**MSc in Game Development (Programming)** focuses upon the development and implementation (coding) of 2D and 3D computer games using industry standard tools and practices. Students will be able to develop for a number of platforms including games consoles, the PCs and mobile devices. The course covers the mathematics, physics and technical skills together with the coding in a number of programming languages.

**MA in Game Development (Design) focuses upon** the design and development of 2D and 3D computer games using industry standard tools and practices. Students will be able to design for a number of platforms including games consoles, PCs and mobile devices. The course covers the principles, practices and processes of games design.

Optional: Each of the pathways is offered with a Professional Placement. This option is to spend an additional year in industry as part of the course. The placement year is a 10 to 12 months period with 30-40 working hours per week with no more than 60 days ‘inactivity’. The placement must be in a company and the work must be relevant to the degree. It could be either in the UK or abroad and has to be approved by the Faculty. The professional placement route is for full time students and is not available to January starters.

Finding the placement is the responsibility of the individual students. If students do not find a suitable placement they will be switched onto the non-placement course.

**B. Aims of the Programme**

*The Aims of the Course are to:*

* Equip students with the capability to use and employ tools, frameworks, models and rules relevant to game development;
* Enhance a student’s job performance and enable him/her to contribute effectively to the knowledge base of the employer;
* Give students the means to explore in detail the analysis, design and evaluation of computer games;
* Develop an enquiring, analytical and creative approach to both personal and professional activities that leads to the critical and responsible use of informed and independent judgement.
* Gain a solid foundation in this specialist area, adding to and integrating, the knowledge and skills gained from each student’s individual educational background and work experience;
* Explore disciplinary boundaries, resolve value conflicts and bridge gaps in knowledge with arguments from first principle and activity at the forefront of best practice.

In addition, the MSc in Game Development (Programming) will enable the students to:

* Apply specialised knowledge and skills, and conduct reflexive, critical and collaborative practice, to the creation and implementation of innovative media-rich computer games and other interactive software.
* Develop students’ reflexive, critical and cross-disciplinary practice with particular regard to games programming.

Whilst the MA in Game Development (Design) will enable the students to

* Apply specialised knowledge and skills, and conduct reflexive, critical and collaborative practice, to the design and development of innovative media-rich computer games
* Develop students’ reflexive, critical and cross-disciplinary practice with particular regard to games design.

**C. Intended Learning Outcomes**

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas:

**Proposal: 1.** Develop and create research proposals to a professional standard and speculate on new and effective approaches to design.

**Theory: 2.** Critically apply theoretical knowledge of design and evaluate contemporary discourse on the subject.

**Research:** **3.** Demonstrate the application of design research methods in formulating concepts and ideas.

**Application: 4.** Originate design propositions through the application of

appropriate design ideologies, research principles, methods, materials and technology, forms, means, actions or interventions.

**Reflection: 5**. Engage in the critical reflection of own work and in peer review, employing skills of evaluation, contextualization and communication.

**Presentation: 6.** Disseminate the research process and outcomes of the Major project with appropriate currency and consideration of audience.

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| **Programme Learning Outcomes** | | | | | |
|  | **Knowledge and Understanding**  **On completion of the course, students will be able to:** |  | **Intellectual skills**  **On completion of the course, students will be able to:** |  | **Subject Practical skills**  **On completion of the course, students will be able to:** |
| A1 | critically evaluate the current developments and emerging research areas within games development; | B1 | critically analyse and evaluate research in games development. Identify contemporary issues; | C1 | select, adapt/extend and use effectively a wide range of methods, tools and techniques for games development; |
| A2 | select, use and recommend the tools and technologies necessary for games development; | B2 | assess and select the tools and methods necessary to solve a games-related problem; | C2 | develop and use games prototypes and mock-ups; |
| A3 | critically discuss the computer games industry itself. This includes ethical, legal and professional issues and the games production process | B3 | synthesise information from diverse disciplines and application domains; | C3 | create games which incorporate advanced digital media (text, graphics, audio and video); |
| A4 | For MA  apply game theory and design methodologies in relation to practical processes and production involved in games development | B4 | report on their work critically in written format, at meetings, or by formal oral presentation; | C4 | apply scientific theories, frameworks, models and design guidelines to all stages of games development. Includes research material; |
| A5 | For MSc  select and apply the mathematics, physics, graphics programming skills involved in games development; | B5 | learn independently, think logically and critically demonstrate a systematic approach to problem-analysis and to finding solutions. | C5 | make real and rationalise innovative computer games that satisfy a range of user-centred criteria (aesthetically pleasing, easy to use, productive, entertaining). |
| A6 | apply knowledge in a professional context, including understanding of their professional development and the structure of the placement organisation (With Professional Placement Only) | B6 | For MA  apply relevant game theory and design methodologies to a games implementation | C6 | relate academic theory to practice, develop and practise key personal and employability skills and show examples of the application of these skills (With Professional Placement Only) |
|  |  | B7 | For MSc  apply relevant mathematics, physics and computing knowledge to a games implementation; |  |  |
|  |  | B8 | reflect critically on their experience during the professional placement, including research and information literacy, numeracy, management and leadership skills. (with Professional Placement Only) |  |  |

In addition to the programme learning outcomes identified overleaf, the programme of study defined in this programme specification will allow

students to develop a range of Key Skills as follows:

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| **Key Skills** | | | | | | |
| **Self Awareness Skills** | **Communication Skills** | **Interpersonal Skills** | **Research and information Literacy Skills** | **Numeracy Skills** | **Management & Leadership Skills** | **Creativity and Problem Solving Skills** |
| Take responsibility for own learning and plan for and record own personal development | Express ideas clearly and unambiguously in writing and the spoken work | Work well with others in a group or team | Search for and select relevant sources of information | Collect data from primary and secondary sources and use appropriate methods to manipulate and analyse this data | Determine the scope of a task (or project) | Apply scientific and other knowledge to analyse and evaluate information and data and to find solutions to problems |
| Recognise own academic strengths and weaknesses, reflect on performance and progress and respond to feedback | Present, challenge and defend ideas and results effectively orally and in writing | Work flexibly and respond to change | Critically evaluate information and use it appropriately | Present and record data in appropriate formats | Identify resources needed to undertake the task (or project) and to schedule and manage the resources | Work with complex ideas and justify judgements made through effective use of evidence |
| Organise self effectively, agreeing and setting realistic targets, accessing support where appropriate and managing time to achieve targets | Actively listen and respond appropriately to ideas of others | Discuss and debate with others and make concession to reach agreement | Apply the ethical and legal requirements in both the access and use of information | Interpret and evaluate data to inform and justify arguments | Evidence ability to successfully complete and evaluate a task (or project), revising the plan where necessary |  |

**D. Entry Requirements**

The minimum entry qualifications for the programme are:

For MA’s, applicants for the MSc and Postgraduate diploma are normally required to have a good BA (Hons) degree or equivalent qualification in graphic design or a related subject, such as moving image, graphic communication, illustration, 3D design, advertising, photography, packaging, computer-related design, architecture or fine art.

For MSc’s, a good BSc (Hons) degree or equivalent qualification in computer science, software engineering, mathematics, physics or related discipline.

Applicants with relevant experience but not necessarily the qualifications or disciplinary background identified above, and who demonstrate the necessary skills and intellectual achievement needed to undertake the course will also be considered. In this case demonstrable work experience through a strong CV and/or a portfolio are required.

Both of these types of applicants will benefit from the advanced and specialised nature of the technical and business knowledge covered the course that is designed to build on the knowledge they already possess.

Overseas students are required to satisfy the Admissions Officer that they have reached an equivalent academic standard as those required for home students.

Language Requirements

IELTS – minimum 6.5 overall, including a minimum of 6.0 in writing, and a minimum of 5.5 in reading, listening and speaking TOEFL IBT with overall score of 88, inc min score of 20/30 Writing, 20/30 Reading, 17/30 Listening and 20/30 Speaking

Prior learning - AP(E)L: Applicants with prior qualifications and learning may be exempt from appropriate parts of a course in accordance with the University's policy for the assessment of prior learning and prior experiential learning.

CRB clearance is not required.

**E. Programme Structure**

This course is part of the University’s Postgraduate Regulations (PR). Courses in the PR are made up of modules that are designated at level 7. Single taught modules in the courses are valued at 30 credits and the course contains a project that has 60 credits. The minimum requirement for a Postgraduate Certificate is 60 credits, for a Postgraduate Diploma 120 credits and a Masters Degree 180 credits.

The course offers the PG Certificate as an exit award only and is based on the student passing any coherent subset of the taught modules.

The awards available are detailed in section A and the requirements are outlined below. All students will be provided with the PR regulations in the student handbook.

The Courses are offered as 1 year full-time, and normally 2-3 years part-time. The course design fully considers all student groups. Delivery of modules is either by two 1-week blocks separated by several weeks, or full-day sessions spread over a teaching block. Overseas students are also able to complete their degree within VISA limitations.

Full-time students will complete the programme of study and assessment in 52 weeks. The normal study pattern for part-time students is that they should complete 4 modules over a two to three year period and complete their project within the same period. Because of the structure of the course, part-time students may be able to commence the course at different times during the academic year after discussion with the Course Leader of relevant issues, including the need for specific preparatory study.

Normally, each module will include approximately 60 hours contact time, followed by directed learning resulting in a total of 300 hours of student effort. The project is the equivalent of two modules and requires 600 hours of student effort.

A January intake is accommodated by ensuring that two technical modules are delivered in the Spring semester. This ensures that all students, including January starters can complete the individual project in the summer without disadvantage.

To address advanced ethics and professional issues, these issues are addressed within the context of technical core modules taken before the project is conducted, specifically, within Digital Studio Practice, Media Specialist Practice and the Individual Project.

To prevent assessment bunching and over assessment, there is a planning meeting at the beginning of teaching blocks 1 and 2.

**E1. Professional and Statutory Regulatory Bodies**

Game Development (Programming) MSc is accredited by the British Computer Society.

**E2. Work-based learning, including sandwich programmes**

The industrial placements team, aided by the Employability Co-ordinator, helps to prepare the students for interview and work, for example, with mock interview sessions, CV workshops, and industry speakers on employers’ needs.

The optional professional placement for 1 year (10 to 12 months) is expected to take place between the formal taught modules and the final project.

Industry-hosted major projects are actively encouraged. It is the responsibility of individual students to source and secure such arrangements giving them more experience and employability skills after their Masters degree. The School has an active **Industry** Panel who support the programme through course design, live projects, mentoring, placements and internships. Indeed many students have taken paid internships as their final project as their skills are very much in demand in the marketplace and it is also possible to take placements abroad by agreement with Staff.

Kingston responded to one of the key recommendations of the Livingstone-Hope review by setting up the inKUbator. This is intended to be a 'hothouse' to grow, manage and nurture game and other digital media projects and enable students to build their portfolios, emulate industry roles and enhance their future employability prospects. It also provides opportunities for co-curricular activities with masters and undergraduate students working together on project. In addition it is intended to help create a culture of entrepreneurship encouraging students to work towards publishing and commercialising their games. inKUbator breaks down the walls between disciplines by providing an environment for students to come together to develop games across multiple faculties. It is working with a number of games companies to explore new technologies and techniques in games development and there are regular speakers from the games industry. This focus beyond just technical skills should aid with portfolio development and employability in the very competitive marketplace facing the future computer games developer.

**E3. Outline Programme Structure**

The programme is made up of four modules each worth 30 credit points plus an individual project worth 60 credits. All students will be provided with the University regulations and specific additions that are sometimes required for accreditation by outside bodies (e.g. professional or statutory bodies that confer professional accreditation).

**Game Development (Programming) MSc Full Time**



**Game Development (Programming) MSc Part Time**



**Game Development (Design) MA Full Time**



**Game Development (Design) MA Part Time**



Full details of each module will be provided in module descriptors and student module guides.

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| **Game Development**  **Level 7** | | | | |
| **Module Names** | **Module code** | **Credit**  **Value** | **Level** | **Teaching Block** |
| **Compulsory Modules** |  |  |  |  |
| Digital Studio Practice | CI7810 | 30 | 7 | TB 1 |
| Media Specialist Practice | CI7820 | 30 | 7 | TB 2 |
| **MSc Game Development (Programming)**  **Additional Compulsory Modules** |  |  |  |  |
| 3D Games Programming | CI7500 | 30 | 7 | TB 1 |
| Real Time Development and Artificial Intelligence | CI7515 | 30 | 7 | TB 2 |
| **MA Game Development (Design)**  **Additional Compulsory Modules** |  |  |  |  |
| Game Design | CI7870 | 30 | 7 | TB 1 |
| **MA Game Development (Design)**  **Option module, choose one of** |  |  |  |  |
| UXD (Content) | CI7830 | 30 | 7 | TB 2 |
| Perfecting the Look | CI7860 | 30 | 7 | TB 2 |
| **For Masters** |  |  |  |  |
| Digital Media Final Project | CI7800 | 60 | 7 | TB 3 |

Level 7 requires the completion of the four 30 credit modules and the Digital Media Final Project.

**Professional Placement**

Students on the Professional Placement additionally take:

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| **… with Professional Placement** |  |  |  |  |
| Professional Placement | CI7900 | 120 | 7 |  |

**F. Principles of Teaching Learning and Assessment**

Digital Media Kingston promotes and sustains a distinctive pattern of teaching and learning practices. Teaching and learning strategies have developed in close relation to the digital media subjects, disciplines and the creative industries. The ways in which students develop knowledge and understanding of their subject is equally distinct, with a strong emphasis being placed on the management of increasingly complex studio based practical digital media projects. Although the nature of the digital media project is that of a holistic design experience the aims of the modules are distinct in the practical project undertaken by the student and as such are assessed individually and collectively in relation to the modules aims.

Students are strongly encouraged to develop their own informed and creative approach, taking into account contemporary research, current industry and digital media practices. This is achieved through the teaching philosophy at DMK, which highlights the importance of knowledge of the contemporary and future digital media context and through awareness of the forces and issues that influence society and industry to meet the needs of present and future generations.

The approach to Teaching, Learning and Assessment is informed by Kingston University’s strategic plan: *Led by Learning*. In particular this provides an emphasis on key aspects of our approach:

* The encouragement and support of high quality teaching informed by research and best practice.
* An environment that will create, test, share and spread knowledge for its own sake.
* Those delivering teaching will be engaged in the development of their discipline.
* The course team will enable students to have the choices and the skills needed for fulfilling professional employment.

A combination of staff and student-lead learning principles have been used in the design of the curriculum and the overarching approach to learning and teaching related to both disciplinary and interdisciplinary knowledge – described by KU as the relationship between *producing* and *pursuing* and *producing* and *authoring*. These principles relate to the exploration of the discipline in response to questions, problems, scenarios and lines of inquiry formulated by tutors and the progressive development of individual approaches based on the formulation of questions by the student. As the course progresses, this can also be expressed as the development from:

*How can I answer* ***this*** *question?* to *How can I answer* ***my*** *question?*

The identity and structure of the course are built upon the understanding that high quality and transformative learning occurs when students are:

* Engaged in authentic, challenging, enquiry-based activities.
* Working collaboratively with peers in a community of shared disciplinary and interdisciplinary practice.
* Able to reflect on and theorise their learning.

This has informed the development of shared learning outcomes across the courses within the PG framework and the focus of these outcomes on the practice of research and its relationship to purposeful making and enquiry in design.

The teaching and learning of practical digital media projects incorporates:

• Analysis of the project brief, research and insight gathering in to the ‘theme’

or objective and subsequent problem finding for problem solving.

• Analysis of context.

• Tools and strategies for creative problem solving and the idea development process.

• The promotion of workshop practices and creative material usage and manipulation.

• Teaching communication and presentation tools and techniques.

• Teaching digital tools for design and realisation

• Tutorials, lectures, seminars and workshops

• Developing students ability to confidently communicate orally

• Project reviews and critiques to promote peer project discussion and debate.

• Encouraging within students self-reflection and self-criticism in relation to a sustainable media practice.

The continual and iterative nature of the making process requires a continual process of formative assessment and feedback through the use of studio tutorials, reviews and group critiques. Summative assessment at the end of the module and formal feedback is provided following review of the submitted/presented project work. Summative assessment at the end of the course is based on the final project module.

The Course is designed to give students a balance of theoretical and practical experience. Formal lectures are used in order to give the students a good background understanding in the area and to develop the theoretical aspects. These are then often reinforced by practical sessions and/or industry specialists who contribute throughout the course in order to give informative insight into industry developments.

The practical workshops, open forums, newswires (e.g. CBDiForum, earthweb, ebiz) and group presentations are introduced into the modules to provide students with a detailed understanding of the approaches taken in industry.

The course gives students the specialised knowledge, tools and techniques and explores with them methods for extracting and synthesising information. However, in order for the students to gain from the course they must draw on the taught material and the experience gained from the practicals and case studies embedded within most modules.

The student is then required to further explore and exploit the information given in the modules through guided self study which will require them to research and define the outcomes accurately and produce detailed solutions and innovative work. This work is designed to enable the students to build up their competencies in research and in writing reports and will enable them to further develop this expertise in order for them to produce their project dissertation.

It is recognised that team working is a very important aspect in industry and this is reflected during the modules. The course ensures that the students are exposed to team working through group presentations, joint report writing, joint research and lab work.

The course team are aware of the need for effective communication, both written and verbal, and the course prides itself on preparing the students for their longer term career plans and CPD. Apart from the project itself, each student has to give verbal presentations during the modules, normally to the student’s peer group and module leader. Students are also helped with verbal communication skills through discussion groups. Many modules are assessed by written assignments that are designed to improve students’ research and evaluation skills.

Students will be given close guidance to select a project that is relevant to their background and specialisation. During the project, the student will be expected to apply the knowledge that he/she has learnt during the course in order to achieve a deliverable whilst satisfying any given constraints. Key skills in communication, presentation, literature search, problem analysis, project planning, report writing and solution justification are all part of the learning outcomes defined in this course.

**Contact Time**

The programme consists of modules in which the learning outcomes are achieved through a combination of scheduled tutor lead activities and practice. Scheduled contact time with students given within each module guide consists of lectures, tutorials, and practical sessions. Contact with staff often takes place in the context of giving feedback on assessed work but will not necessarily be scheduled. In addition to these there are daily drop-in sessions at the School’s Academic Skills Centre where support is provided on a one-to-one basis.

Typically contact time with students consists of:

Formal lectures:

* + Face-to-face
  + Video or audio lectures, upload or web-cast
  + Computer workshops/laboratories:
  + Individual projects
  + Group projects

Seminars

Problem solving classes

Independent and guided learning from e-resources, texts and work books

Research projects

Simulations

Visits, from or to, outside organizations

Assessment

e-learning: Online forums; Twitter and other forms of social media; Blended learning; Video/Audio materials

**Canvas**

Canvas, the university’s learning management system, is used extensively in all modules as a means of dissemination of lecture notes, worksheets, assignments, reference materials, links, videos and lecturer annotated slides. In this way it acts as a repository for learning materials to be used by the students for independent study and in addition in some modules, for formative and summative tests and surveys.

**Assessment and Feedback**

There are ample opportunities given to students for formative assessment with rapid feedback that is an important aid to students’ learning and subsequent summative assessment.

A wide range of other assessment mechanisms, outlined in section C above, are used to ensure that students with different backgrounds and different strengths are not disadvantaged and to ensure that our students are capable of tackling many different types of problems. The methods of assessment have been selected so as to be most appropriate for the nature of the subject material, teaching style and learning outcomes in each module and the balance between the various assessment methods for each module reflects the specified learning outcomes.

At the end of the course every student undertakes a project dissertation which is a significant activity that draws on and enhances the skills and knowledge developed throughout the programme. As such the assessment places greater emphasis on ability to plan work, manage time effectively, and research background information, culminating in portfolio of written reports and an interview.

Formative assessment strategies and feedback opportunities include short or quick quizzes consisting of multiple choice or short answer questions and mock exams designed to reinforce concept learning and build subject confidence and may be delivered online as part of computer-aided assessment.

Other feedback opportunities are afforded during preparation for summative assessment for example, reviewing draft assignments by peers and/or tutor.

1. In the programme as a whole, the following components are used in the assessment of the various modules:

- **Multiple choice or short answer questions**: to assess competence in basic techniques and understanding of concepts

- **Long answered structured questions** in coursework assignments: to assess ability to apply learned techniques to solve simple to medium problems and which may include a limited investigative component

- **Long answer structured questions** in end-of-module examinations: to assess overall breadth of knowledge and technical competence to provide concise and accurate solutions within restricted time

- **Practical exercises**: to assess students’ understanding and technical competence

- **Group-based case studies**: to assess ability to understand requirements, to provide solutions to realistic problems and to interact and work effectively with others as a contributing member of a team. The outcomes can be:

- **Written report**, where the ability to communicate the relevant concepts, methods, results and conclusions effectively will be assessed.

- **Oral presentation**, where the ability to summarise accurately and communicate clearly the key points from the work in a brief presentation will be assessed.

- **Poster presentation** where information and results must be succinct and eye-catching.

Key skills developed throughout the course form an integral part of an assessment.

Students are supported in this by their module leaders as well as their course leader and personal tutor, who will help them to draw together the themes of the curriculum and ensure participation in formative feedback and that feed-forward opportunities are realised. The project dissertation provides an obvious opportunity for students to integrate all the knowledge and skills acquired throughout the course.

**Research Informed Teaching**

The course team is research active within the Digital Information Research Centre (DIRC), which is dedicated to the advancement of the theory and applicability of computer science to enable internationally-leading work in the field of informatics, addressing the needs of society in the thematic areas of health, communications, security and data. The centre provides an inclusive and outward looking environment for research development, fostering interdisciplinary and multidisciplinary research to achieve maximum impact in real-world applications.

The following areas are examples of research informed teaching in our courses:

* NoobLab is an online programming environment that has emerged as an artefact from research by the Technology Enhanced Learning Group. Targeted at those students who are new to programming, it provides an immersive learning experience in which practical exercises can be delivered in a stimulating, engaging fashion, with real-time feedback provided to the student as they work and progress at their own pace. The School has internationally recognised research groups that feed into and support student learning through its teaching programme.
* The computer vision activity within the centre has internationally recognised expertise in visual surveillance, medical imaging and intelligent environments. Recently, the centre coordinated a special session of the Computer Vision and Pattern Recognition conference on “Computer Vision for Computer Games”. The Human Body Motion Group within DIRC works on the extraction, analysis and synthesis of human motion using video footage and motion capture data for graphics and games applications. Thus there is good linkage between research and teaching and the teaching team for computer science draws from DIRC members.
* The Wireless Multimedia and Networking Research Group carries out fundamental and applied research on wireless communications and networking, media streaming and closely related fields. It investigates adaptive delivery of media information with an adequate quality of service. Research activity relies on the different fields of information theory, signal processing and applied mathematics, communication theory, wireless networking and security.

Students are also able to develop their research skills which form a fundamental part of the curriculum. These skills enable students to distinguish and present appropriate evidentiary information in an argument. These skills are greatly valued by employers.

Staff also engage with research into teaching and learning in Higher Education which feeds through to support learning in lectures and other forms of student engagement during contact time.

The assessment during the Professional Placement year will include a reflective practice piece of work, a professional development portfolio (PDP) and the employer’s appraisal. The performance and attendance will be regularly monitored through the placement year. The marking of the placement is “pass” or “fail”.

**G. Support for Students and their Learning**

Students are supported by a highly qualified team of academic staff that includes individuals in the following roles:

* A Course Leader to help students understand the programme structure
* A Module Leader for each module
* A Personal Tutor to provide academic and personal support

Additional support is provided by the following specialist staff:

* A Placement Tutor to give general advice on placements
* Technical Support to advise students on IT and the use of software
* A designated Programme Administrator, known as a Field Leader
* English language support for international students

Matters outside the academic arena are supported by:

* Student support facilities that provide advice on issues such as finance, regulations, legal matters, accommodation, international student support etc.
* Disability and dyslexia student support
* A substantial Study Skills Centre that provides academic skills support
* Careers and Employability Service
* The Students’ Union
* An induction week at the beginning of each new academic session
* Staff Student Consultative Committee

The students are introduced to all these mechanisms during induction sessions at the beginning of each new academic year. It is here that the level 4 students first encounter the university’s computer network, which includes their personal access to the university’s VLE and how to use it as a learning environment. They are also encouraged to make use of the substantial Study Skills Centre, an important resource that provides additional help across a range of academic skills.

Students are expected to be involved in the development of their programme. On an individual level through meetings with their personal tutors at which they can discuss their academic progress, personal development and can seek advice on course and module choices in the light of their career aspirations. As a cohort, students can contribute to many aspects of programme evolution, for example by student representation on committees including Staff Student Consultative Committees as well as by their formal and informal feedback such as the mid-module and end-of-module reviews.

**Support for Academic Skills**

There is a range of support available within the School, which includes but is not limited to:

SEC Academic Success Centre (SASC)

Drop-in Programming Sessions (Programming Aid)

Drop-in Maths Aid sessions

Academic Probation Programme, with Academic Success Workshops

SEC Academic Success Centre (SASC) is a one-to-one drop-in Study Skills session for students every weekday. Help is available on a range of academic skills from writing reports, note-taking, to exam revision, referencing, and mathematical skills.

**Faculty Student Support and Engagement**

The Faculty Student Support and Engagement Officer (FSSEO) is part of a wider support network to help students make the most of their time at Kingston. This can help when students: have questions or difficulties outside their academic work; think they need help from more than one service ; would like to discuss their options

**StudentHUB**

The StudentHUB is available to all Kingston University students and provides access to support services on a 24/7 year round basis. If they can’t find their answer there, then they can submit an enquiry to our expert professional staff, trained in their specific field.

Professional Placement Support

The students choosing the optional Professional Placement will receive additional support via an online database for local job opportunities, “JobShop” and from a dedicated careers team, which will offer CV and cover letter workshops, employers fairs and special events.

In addition students are supported by:

**The Studio Structure:** All courses within DMK place the studio at the heart of the learning support experience. The studio is both a physical environment and a practical education ethos. It affirms course and student identity with each course occupying its own space. The typical developmental curriculum journey from principles to processes to practices may be mapped to individual studio experiences. The studio provides a natural and readily available environment for peer-to-peer learning and group work. It also accommodates 1:1 contact and individual learning. A strategic programme of lectures, seminars and workshops supports the studio learning experience.

**Workshop Structure:** The diverse range of workshop spaces provide an integral resource to support studio learning. They are an extension of the studio space but equipped with particular, specialist facilities.

**Staff Structure:** The staff support structure maps to the studio system. Course leaders co-ordinate the course and studio space. They are operational figureheads who work together with staff teams and HPLs from industry (incorporating module leaders) to deliver the appropriate learning and teaching experience. Staff mediate this experience across each stage of the course, moving from an explicit to implicit role in students’ development, enabling students to learn how to learn and become more progressively independent. Dedicated technicians provide workshop space learning support in conjunction with the academic staff teams.

**The Personal Tutor Scheme**

A Personal Tutoring Scheme is established across the Faculty to help masters students realise their potential and to advise on the matters such as career development and employability. A personal tutor is assigned to each masters student and is a member of the teaching team on their course. The first contact between student and the Personal Tutor is during Induction Week for an introductory meeting and thereafter a scheduled set of meetings is set up to ensure the continuity of the student progress and the appropriate personal development throughout the course. The minimum of three meetings per academic year is a norm.

**Level 7 : Getting the most out of the Masters**

* To help students to make the transition to Masters level study and understand how to use feedback on the postgraduate course
* To encourage students to be proactive in making links between their course and their professional and/or academic aspirations
* To explore students’ research aspirations
* To help students gain confidence in contributing to, and learning from, constructive peer review
* To encourage students to become part of a wider disciplinary and/or professional community
* To help students to prepare for the dynamics of supervision

**H. Ensuring and Enhancing the Quality of the Course**

The University has several methods for evaluating and improving the quality and standards of its provision. These include:

* Periodic review undertaken at the subject level
* Boards of study with student representation
* Annual review and development
* Student evaluation
* Moderation policies

**I. Employability Statement**

All courses in DMK address the issue of employability through engaging directly with industry and external partners and institutions. This is supported in course teaching by the professional and industrial expertise of course teams as well as visiting specialist practitioners.

This ethos of professionalism is planned and delivered through the course curriculum so that students are effectively equipped for the world of work on their graduation from the course.

The courses and both Schools have strong and well-established links to the digital media industry both nationally and internationally. This is significant for the course as a high percentage of students are from and, post graduation, return to a wide range of international locations. Modules within the course structure are intended to address the changing nature of the disciplines of digital media production and the emerging global workplace. Where relevant and practical the course works in collaboration with organisations and business. Competitions are offered within the delivery of the course as activities intended to provide opportunities for those students who wish to allow an additional focus to their portfolio. The course also organises a regular programme of professional lectures and studio visits**.**

Graduates of the existing Games Development course have joined global and major UK companies as a Graduate Games Programmer, Criterion Games; a QA, Beta Tester at Colossal Games, 3D Artist Intern at Colossal Games; Character Artist at Extra Mile Studios and a Coordinating Designer at Aventurine South Africa.

**Curriculum, Employability and Practical Skills**

Employability is signposted in the curriculum where the emphasis is on applying knowledge, developing practical skills and applying them in mini-projects representing typical workplace issues. Aspects of employability and professional, legal, ethical etc are covered in the Digital Studio Practice module and also the Digital Media Final Project. The Digital Media Final Project enables the student to showcase their ability to manage and develop their work.

Curriculum developments are discussed by the School’s Industrial Advisory Panel. The School has strong links with both industry and the professional body, the BCS the Chartered Institute for IT. It hosts a local BCS chapter and several members of the School are involved with the Institute at corporate level.

**J. Approved Variants from the PR**

**None**

**K. Other sources of information that you may wish to consult**

QAA Benchmark statement website: <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Subject-benchmark-statement-Computing.aspx>

Professional or statutory body information: <http://www.bcs.org/>

Module guides

Student handbook

**Development of Programme Learning Outcomes in Modules**

This map identifies where the programme learning outcomes are assessed across the modules for this programme. It provides an aid to academic staff in understanding how individual modules contribute to the programme aims, and a means to help students monitor their own learning, personal and professional development as the programme progresses and a checklist for quality assurance purposes.

|  |  |  |  | **Level 7** | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module Code** |  | **CI7810\*** | **CI7820\*** | **CI7500** | **CI7515** | **CI7870** | **CI7830** | **CI7860** | **CI7800\*** | **CI7900** |
| **Programme Learning Outcomes** | **Knowledge & Understanding** | A1 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| A2 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| A3 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| A4 | S/F | S/F | S/F | S/F |  |  |  | S/F | F |
| A5 | S/F | S/F |  |  |  | S/F | S/F | S/F | F |
| A6 |  |  |  |  |  |  |  |  | S/F |
| **Intellectual Skills** | B1 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| B2 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| B3 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| B4 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| B5 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| B6 | S/F | S/F |  |  | S/F | S/F | S/F | S/F | F |
| B7 | S/F | S/F | S/F | S/F |  |  |  | S/F | F |
| B8 |  |  |  |  |  |  |  |  | S/F |
| **Subject Practical Skills** | C1 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| C2 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| C3 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| C4 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
| C5 | S/F | S/F | S/F | S/F | S/F | S/F | S/F | S/F | F |
|  |  | C6 |  |  |  |  |  |  |  |  | S/F |

**S** indicates where a summative assessment occurs.

**F** where formative assessment/feedback occurs.

***\* indicates module core to both pathways***

**Technical Annex**

|  |  |
| --- | --- |
| **Final Award(s):** | MA, or MSc |
| **Intermediate Award(s):** | PgCert and PgDip |
| **Minimum period of registration:** | FT = 1 year\* PT = 2 years |
| **Maximum period of registration:** | FT = 2 years\* PT = 4 years |
| **FHEQ Level for the Final Award:** | Masters |
| **QAA Subject Benchmark:** | None at PG level, but aware of the UG Benchmarks in Art & Design |
| **Modes of Delivery:** | Full-Time, Part-Time |
| **Language of Delivery:** | English |
| **Faculty:** | SEC |
| **School:** | Computer Science and Mathematics (SEC) |
| **JACS code:** | G900/W900 |
| **UCAS Code:** | N/A |
| **Course Code:** | \*GDP\* (programming) and \*GDD\* (design) |
| **Route Code:** |  |

\* The Professional Placement route adds an additional year